

**REVISED EXPRESS TERMS
FOR
PROPOSED BUILDING STANDARDS
OF THE
DIVISION OF THE STATE ARCHITECT - STRUCTURAL SAFETY
REGARDING THE ADOPTION BY REFERENCE OF THE
2006 EDITION UNIFORM PLUMBING CODE (UPC) WITH PROPOSED AMENDMENTS
INTO THE 2007 CALIFORNIA PLUMBING CODE (CPC)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 5**

The Division of the State Architect - Structural Safety (DSA-SS) proposes to adopt the 2006 edition of the Uniform Plumbing Code (UPC) for codification and effectiveness into the 2007 edition of the California Plumbing Code (CPC) as presented on the following pages, including any necessary amendments. DSA-SS further proposes to:

- Repeal the 2000 edition of the Uniform Plumbing Code;
- Repeal amendments to the model codes that are no longer necessary, repeal or amend building standards that are not addressed by a model code;
- Relocate or codify existing adopted and necessary amendments to the model code into the format of the model code proposed for adoption, the action of which has no regulatory effect; adopt new necessary amendments to the model code proposed for adoption; and/or
- Adopt new building standards that are not addressed by the model code proposed for adoption

LEGEND FOR EXPRESS TERMS:

1. Existing California amendments or code language being modified: All such language appears in *italics*, modified language is underlined or shown in ~~strikeout~~.
 2. New UPC language with new California amendments: UPC language shown in normal Arial 9 point; California amendments to UPC text shown *underlined and in italics*.
 3. Repealed text: All such language appears in ~~strikeout~~.
 4. Amended, adopted or repealed language after public hearing: Amended, adopted, or repealed language will appear in double underline and ~~double strikeout~~.
 5. Notation: Authority and Reference citations are provided at the end of each chapter.
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Original Express Terms:

CHAPTER 6 - Water Supply and Distribution

604.0 Materials (*note to reader - 2001 CA Plumbing Code Section 604.1 shown below*)

604.1 Water distribution pipe, building supply water pipe, and fittings shall be of brass, copper, cast iron, CPVC, galvanized malleable iron, galvanized wrought iron, galvanized steel, PEX, or other approved materials. Asbestos-cement, PE, PVC, PEX-AL-PEX, or PE-AL-PE water pipe manufactured to recognized standards may be used for cold water building supply distribution systems outside a building. PEX-AL-PEX water pipe, tubing, and fittings manufactured to recognized standards may be used for hot and cold water distribution systems within a building. PE-AL-PE water pipe and fittings may be used for cold water distribution systems within a building. All materials used in the water supply system, except valves and similar devices, shall be of a like material, except where otherwise approved by the Authority having Jurisdiction.

~~**Exception: 2. [For DSA/SS] Use of PEX piping is not adopted for applications under the authority of the Division of State Architect.**~~

Revised Express Terms: (note to reader - 2006 UPC Table 6-4 shown below)

TABLE 6-4¹

Material	Water Distribution Pipe and Fittings		Building Supply Pipe and Fittings
	Hot	Cold	
Asbestos – Cement			X
Brass	X	X	X
Copper	X	X	X
Cast Iron	X	X	X
CPVC	X	X	X
Galvanized Malleable Iron	X	X	X
Galvanized Wrought Iron	X	X	X
Galvanized Steel	X	X	X
PE			X
PE-AL-PE	X	X	X
PEX ¹	X	X	X
PEX-AL-PEX ¹	X	X	X
PVC			X

1 [For DSA-SS] The use of PEX and PEX-AL-PEX in potable water supply systems is not adopted for applications under the authority of the Division of the State Architect-Structural Safety.

Rationale:

Building standards for cross-linked polyethylene tubing (PEX) first appeared in the 2000 Uniform Plumbing Code; and building standards for cross-linked polyethylene-aluminum-cross-linked polyethylene tubing (PEX-AL-PEX) first appeared in the 2003 Uniform Plumbing Code. PEX and PEX-AL-PEX are now utilized in 49 other states, and in over 300 localities in California.

DSA gives great weight to the methods and testing which led to inclusion of these products in the Uniform Plumbing Code; and for this reason, included the products in the proposed 2007 California Plumbing Code. However, during the public comment period for adoption of these products into the 2007 California Plumbing Code several issues were raised that cannot be fully addressed within the timeframe for adoption in this code adoption cycle. Therefore, DSA proposes to remove proposed building standards for PEX and PEX-AL-PEX from the proposed 2007 California Plumbing Code.

Original Express Terms:

604.11 PEX. ~~[Not Adopted by DSA]~~ Cross-linked polyethylene (PEX) tubing shall be marked with the appropriate standard designation(s) listed in Table 14-1 for which the tubing has been listed or approved. PEX tubing shall be installed in compliance with the provisions of this section.

Revised Express Terms:

604.11 PEX. [Not Adopted by DSA-SS] Cross-linked polyethylene (PEX) tubing shall be marked with the appropriate standard designation(s) listed in Table 14-1 for which the tubing has been listed or approved. PEX tubing shall be installed in compliance with the provisions of this section.

Rationale:

Building standards for cross-linked polyethylene tubing (PEX) first appeared in the 2000 Uniform Plumbing Code; and building standards for cross-linked polyethylene-aluminum-cross-linked polyethylene tubing (PEX-AL-PEX) first appeared in the 2003 Uniform Plumbing Code. PEX and PEX-AL-PEX are now utilized in 49 other states, and in over 300 localities in California.

DSA gives great weight to the methods and testing which led to inclusion of these products in the Uniform Plumbing Code; and for this reason, included the products in the proposed 2007 California Plumbing Code. However, during the public comment period for adoption of these products into the 2007 California Plumbing Code several issues were raised that cannot be fully addressed within the timeframe for adoption in this code adoption cycle. Therefore, DSA proposes to remove proposed building standards for PEX and PEX-AL-PEX from the proposed 2007 California Plumbing Code.

Original Express Terms:

604.11.1 PEX Fittings. ~~[Not Adopted by DSA]~~ Metal insert fittings, metal compression fittings, and cold expansion fittings used with PEX tubing shall be manufactured to and marked in accordance with the standards for the fittings in Table 14-1.

Revised Express Terms:

604.11.1 PEX Fittings. [Not Adopted by DSA-SS] Metal insert fittings, metal compression fittings, and cold expansion fittings used with PEX tubing shall be manufactured to and marked in accordance with the standards for the fittings in Table 14-1.

Rationale:

Building standards for cross-linked polyethylene tubing (PEX) first appeared in the 2000 Uniform Plumbing Code; and building standards for cross-linked polyethylene-aluminum-cross-linked polyethylene tubing (PEX-AL-PEX) first appeared in the 2003 Uniform Plumbing Code. PEX and PEX-AL-PEX are now utilized in 49 other states, and in over 300 localities in California.

DSA gives great weight to the methods and testing which led to inclusion of these products in the Uniform Plumbing Code; and for this reason, included the products in the proposed 2007 California Plumbing Code. However, during the public comment period for adoption of these products into the 2007 California Plumbing Code several issues were raised that cannot be fully addressed within the timeframe for adoption in this code adoption cycle. Therefore, DSA proposes to remove proposed building standards for PEX and PEX-AL-PEX from the proposed 2007 California Plumbing Code.

Original Express Terms:

604.11.2 Water Heater Connections. ~~[Not Adopted by DSA]~~ PEX tubing shall not be installed within the first eighteen (18) inches (457mm) of piping connected to a water heater.

Revised Express Terms:

604.11.2 Water Heater Connections. [Not Adopted by DSA-SS] PEX tubing shall not be installed within the first eighteen (18) inches (457mm) of piping connected to a water heater.

Rationale:

Building standards for cross-linked polyethylene tubing (PEX) first appeared in the 2000 Uniform Plumbing Code; and building standards for cross-linked polyethylene-aluminum-cross-linked polyethylene tubing (PEX-AL-PEX) first appeared in the 2003 Uniform Plumbing Code. PEX and PEX-AL-PEX are now utilized in 49 other states, and in over 300 localities in California.

DSA gives great weight to the methods and testing which led to inclusion of these products in the Uniform Plumbing Code; and for this reason, included the products in the proposed 2007 California Plumbing Code. However, during the public comment period for adoption of these products into the 2007 California Plumbing Code several issues were raised that cannot be fully addressed within the timeframe for adoption in this code adoption cycle. Therefore, DSA proposes to remove proposed building standards for PEX and PEX-AL-PEX from the proposed 2007 California Plumbing Code.

Original Express Terms:

None proposed for this section (DSA-SS proposed to adopt UPC Section 604.13 without amendment).

Revised Express Terms:

604.13 PEX-AL-PEX and PE-AL-PE. Crosslinked polyethylene-aluminum-crosslinked polyethylene (PEX-AL-PEX) and polyethylene-aluminum-polyethylene (PE-AL-PE) composite pipe shall be marked with the appropriate standard designations listed in Table 14-1 for which the piping has been listed or approved. PEX-AL-PEX and PE-AL-PE piping shall be installed in compliance with the provisions of this section.

[DSA-SS] PEX-AL-PEX is not adopted for use in potable water supply and distribution systems.

Rationale:

Building standards for cross-linked polyethylene tubing (PEX) first appeared in the 2000 Uniform Plumbing Code; and building standards for cross-linked polyethylene-aluminum-cross-linked polyethylene tubing (PEX-AL-PEX) first appeared in the 2003 Uniform Plumbing Code. PEX and PEX-AL-PEX are now utilized in 49 other states, and in over 300 localities in California.

DSA gives great weight to the methods and testing which led to inclusion of these products in the Uniform Plumbing Code; and for this reason, included the products in the proposed 2007 California Plumbing Code. However, during the public comment period for adoption of these products into the 2007 California Plumbing Code several issues were raised that cannot be fully addressed within the timeframe for adoption in this code adoption cycle. Therefore, DSA proposes to remove proposed building standards for PEX and PEX-AL-PEX from the proposed 2007 California Plumbing Code.

Original Express Terms:

None proposed for this section (DSA-SS proposed to adopt UPC Section 604.13.1 without amendment).

Revised Express Terms:

604.13.1 PEX-AL-PEX and PE-AL-PE. Fittings used with PEX-AL-PEX and PE-AL-PE piping shall be manufactured to and marked in accordance with the standard for the fittings in Table 14-1.

[DSA-SS] PEX-AL-PEX is not adopted for use in potable water supply and distribution systems

Rationale:

Building standards for cross-linked polyethylene tubing (PEX) first appeared in the 2000 Uniform Plumbing Code; and building standards for cross-linked polyethylene-aluminum-cross-linked polyethylene tubing (PEX-AL-PEX) first appeared in the 2003 Uniform Plumbing Code. PEX and PEX-AL-PEX are now utilized in 49 other states, and in over 300 localities in California.

DSA gives great weight to the methods and testing which led to inclusion of these products in the Uniform Plumbing Code; and for this reason, included the products in the proposed 2007 California Plumbing Code. However, during the public comment period for adoption of these products into the 2007 California Plumbing Code several issues were raised that cannot be fully addressed within the timeframe for adoption in this code adoption cycle. Therefore, DSA proposes to remove proposed building standards for PEX and PEX-AL-PEX from the proposed 2007 California Plumbing Code.

Original Proposed Amendment:

None proposed for this section (DSA-SS proposed to adopt UPC Section 604.13.2 without amendment).

Revised Express Terms:

604.13.2 Water Heater Connections. PEX-ALPEX or PE-AL-PE tubing shall not be installed within the first eighteen inches (18) (457 mm) of piping connected to a water heater.

[DSA-SS] PEX-AL-PEX is not adopted for use in potable water supply and distribution systems

Rationale:

Building standards for cross-linked polyethylene tubing (PEX) first appeared in the 2000 Uniform Plumbing Code; and building standards for cross-linked polyethylene-aluminum-cross-linked polyethylene tubing (PEX-AL-PEX) first

appeared in the 2003 Uniform Plumbing Code. PEX and PEX-AL-PEX are now utilized in 49 other states, and in over 300 localities in California.

DSA gives great weight to the methods and testing which led to inclusion of these products in the Uniform Plumbing Code; and for this reason, included the products in the proposed 2007 California Plumbing Code. However, during the public comment period for adoption of these products into the 2007 California Plumbing Code several issues were raised that cannot be fully addressed within the timeframe for adoption in this code adoption cycle. Therefore, DSA proposes to remove proposed building standards for PEX and PEX-AL-PEX from the proposed 2007 California Plumbing Code.

Authority: Education Code § 17310 and 81142, and H&S Code §16022.

Reference: Education Code §§ 17280 through 17317, and 81130 through 81147, and H&S Code §§16000 through 16023.